

## **AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

### **LISTING OF THE CLAIMS**

1. (Original) A method of cleaning a contaminated material which comprises a solid material which is contaminated with a hydrocarbon, the method comprising the steps of:

(A) contacting the contaminated material with a surface active agent thereby to form a first mixture including said contaminated material and said surface active agent;

(B) contacting said first mixture with a carrier formulation to prepare a second mixture wherein said carrier formulation is arranged to interact with said surface active agent and/or said hydrocarbon;

(C) separating said solid material in said second mixture from other components in the second mixture, wherein said solid material which is separated contains a lower level of said hydrocarbon compared to that in said contaminated material contacted in step (A).

2. (Original) A method according to claim 1, wherein said contaminated material contacted in the method comprises drill cuttings produced when drilling for oil or gas.

3. (Currently Amended) A method according to claim 1 ~~or claim 2~~, wherein said contaminated material is contaminated with a drilling fluid and/or with petroleum.

4. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said contaminated material comprises at least 5wt% of fluidic hydrocarbon(s).

5. (Currently Amended) A method according to ~~any preceding claim~~ claim 1,

wherein said contaminated material comprises at least 5wt% of oil.

6. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein, in the method, a mass of said contaminated material is selected and contacted with said surfactant and the ratio of the wt% of said mass to the wt% of said surfactant is at least 10 and is less than 200.

7. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said surface active agent includes a hydrophobic moiety which has an aromatic ring system.

8. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said surface active agent includes an hydrophilic moiety.

9. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said surface active agent is an anionic surfactant.

10. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said surface active agent is wholly soluble in oil of the type contaminating the solid material at 25°C.

11. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said contaminated material contacted in step (A) comprises 10 to 20wt% of hydrocarbon contaminant and 80 to 90wt% of drill cuttings.

12. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said first mixture contacted in step (B) comprises 100 parts by weight (pbw) of solid material, 10 to 20pbw of hydrocarbon(s); up to 5pbw of surface active agents; and up to 10pbw water.

13. (Currently Amended) A method according to ~~any preceding claim~~ claim 1,

wherein said carrier formulation contacted with said first mixture in step (B) includes a carrier which is arranged to interact with a hydrophilic moiety of said surface active material.

14. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said carrier includes a polar moiety.

15. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said carrier is a first polymeric material which includes a multiplicity of cationic moieties.

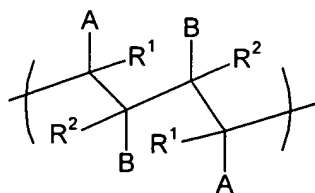
16. (Original) A method according to claim 15, wherein said first polymeric material includes hydroxyl groups pendent from a polymeric chain.

17. (Currently Amended) A method according to claim 1 ~~15 or claim 16~~ wherein said carrier comprises a first polymeric material which incorporates a polyvinyl alcohol moiety.

18. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said carrier formulation is aqueous and includes at least 85wt% of water.

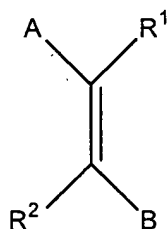
19. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein said carrier formulation comprises a said first polymeric material which comprises a second polymeric material cross-linked by a third polymeric material, wherein said third polymeric material comprises:

(i) a third polymeric material having a repeat unit of formula



wherein A and B are the same or different, are selected from optionally-substituted aromatic and heteroaromatic groups and at least one comprises a relatively polar atom or group and R<sup>1</sup> and R<sup>2</sup> independently comprise relatively non-polar atoms or groups; or

(ii) a third polymeric material prepared or preparable by providing a compound of general formula



wherein A, B, R<sup>1</sup> and R<sup>2</sup> are as described above, in an aqueous solvent and causing the groups C=C in said compound to react with one another to form said third polymeric material.

20. (Original) A method according to claim 19, wherein said third and second polymeric materials are reacted to form said first polymeric material prior to contact with said contaminated material.

21. (Currently Amended) A method according to claim 19 ~~or claim 20~~, wherein, prior to step (B), said method comprises selecting a said third polymer material; selecting a second polymeric material which includes a functional group which is able to react in the presence of said third polymeric material to form said first polymeric material; and causing the formation of said first polymeric material by a reaction involving said third and second polymeric materials.

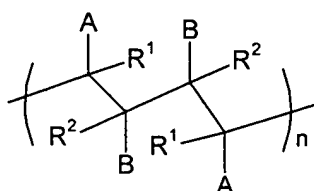
22. (Original) A method according to claim 21, wherein the ratio of the wt% of said third polymeric material to the wt% of said second polymeric material selected for preparation of said first polymeric material is less than 0.1 and is at least 0.01.

23. (Currently Amended) A method according to ~~any of claims 19 to 22~~ claim

19, wherein one of A or B represents an optionally-substituted aromatic group and the other one represents an optionally-substituted heteroaromatic group.

24. (Currently Amended) A method according to ~~any of claims 19 to 23~~ claim 19, wherein R<sub>1</sub> and R<sub>2</sub> are independently selected from a hydrogen atom or an optionally-substituted alkyl group.

25. (Currently Amended) A method according to ~~any of claims 19 to 23~~ claim 19, wherein said third polymeric material is of formula:



wherein n is an integer.

26. (Currently Amended) A method according to ~~any of claims 19 to 25~~ claim 19, wherein said second polymeric compound is selected from optionally-substituted polyvinyl alcohol, polyvinyl acetate and polyalkylene glycols.

27. (Currently Amended) A method according to ~~any of claims 19 to 26~~ claim 19, wherein said second polymeric material includes at least one vinyl alcohol/vinyl acetate copolymer.

28. (Currently Amended) A method according to ~~any preceding claim~~ claim 17, wherein in step (B) said second mixture is mixed to effect intimate contact between the components therein.

29. (Currently Amended) A method according to ~~any preceding claim~~ claim 28, wherein step (C) includes allowing solid material to settle.

30. (Currently Amended) A method according to ~~any preceding claim~~ claim

29, wherein after step (B) and before step (C), said second mixture is contacted with further water.

31. (Currently Amended) A method according to ~~any preceding claim~~ claim 29, wherein after step (C) the method comprises, in a step (D), separating components which remain in said second mixture from one another.

32. (Original) A method according to claim 31, wherein in step (D), said carrier is caused to form a precipitate.

33. (Original) A method of cleaning a contaminated material comprising a solid material which is contaminated with a hydrocarbon, the method including the steps of:

(A\*) contacting the contaminated material with a first polymeric material and/or with second and third polymeric materials of the types described in any preceding claim to prepare a mixture; and

(B\*) separating solid material which is less contaminated than the contaminated material contacted in step (A) from other components in the mixture.

34. (Currently Amended) The use decontamination of drill cuttings by applying an effective amount of a first polymeric material and/or second and/or third polymeric materials according to the method as described in ~~any preceding claim 1, in the decontamination of drill cuttings.~~

35. (Currently Amended) Drill cuttings containing a trace of ~~a first, second or third polymeric material as described in any preceding claim~~ polyvinylalcohol.